

Claims

[c1] What is claimed is:

1.A method for updating software in a plurality of clients connected to a host through a network, the method comprising:

connecting an updating device to the host, the updating device storing updated software to be used for updating software stored in the clients;

initiating communication between the updating device and the host;

transmitting the updated software from the updating device to the host; and

the host uploading the updated software to each of the clients for replacing previous versions of software stored in the clients with the updated software.

[c2] 2.The method of claim 1 wherein initiating communication between the updating device and the host comprises the updating device requesting to send updated software to the host and the host granting the updating device's request to send the updated software.

[c3] 3.The method of claim 1 wherein before transmitting the updated software from the updating device to the host,

the host determines an order in which to upload the updated software to the clients.

- [c4] 4.The method of claim 3 wherein the host calculates the connection speed between the host and each of the clients, and sorts the clients in order of decreasing connection speed for determining the order in which to upload the updated software to the clients.
- [c5] 5.The method of claim 3 wherein before uploading the updated software to the clients, the host informs the updating device of the order in which the host will upload the software to the clients.
- [c6] 6.The method of claim 1 further comprising the host informing the updating device about progress made with the uploading process while the host is uploading the updated software to the clients.
- [c7] 7.The method of claim 1 further comprising the host notifying the updating device that the update is complete after the host has finished uploading the updated software to each of the clients.
- [c8] 8.The method of claim 1 wherein the host uploading the updated software to each of the clients comprises: the host transmitting the updated software to each client;

the client checking that the updated software was successfully received and reporting the result to the host; the host commanding the client to replace the previous version of software stored in the client with the updated software if the client has successfully received the updated software; and
the host commanding the client to reboot and reconnect to the host.

- [c9] 9.The method of claim 8 wherein if the client has not successfully received the updated software, the host re-sends the updated software to the client.
- [c10] 10.The method of claim 1 wherein when the updating device transmits the updated software to the host, the host stores the updated software in a buffer before uploading the updated software to the clients.
- [c11] 11.The method of claim 1 wherein the clients are remotely connected to the host through the Internet.
- [c12] 12.The method of claim 1 wherein the clients are locally connected to the host through a local network.
- [c13] 13.The method of claim 1 wherein the updating device is a computer.
- [c14] 14.A method for updating software in a plurality of

clients connected to a host through a network, the method comprising:

- connecting an updating device to the host, the updating device storing updated software to be used for updating software stored in the clients;
- the updating device requesting to send updated software to the host;
- the host granting the updating device's request to send the updated software;
- transmitting the updated software from the updating device to the host;
- the host calculating the connection speed between the host and each of the clients;
- the host sorting the clients in order of decreasing connection speed for determining the order in which to upload the updated software to the clients;
- the host informing the updating device of the order in which the host will upload the software to the clients;
- the host transmitting the updated software to each client in the determined order;
- the clients checking that the updated software was successfully received and reporting the result to the host;
- the host commanding the clients to replace the previous version of software stored in the clients with the updated software if the clients have successfully received the updated software; and

the host commanding the clients to reboot and reconnect to the host.

- [c15] 15.The method of claim 14 further comprising the host notifying the updating device that the update is complete after the host has finished uploading the updated software to each of the clients.
- [c16] 16.The method of claim 14 further comprising the host informing the updating device about progress made with the uploading process while the host is uploading the updated software to the clients.
- [c17] 17.The method of claim 14 wherein if the client has not successfully received the updated software, the host re-sends the updated software to the client.
- [c18] 18.The method of claim 14 wherein when the updating device transmits the updated software to the host, the host stores the updated software in a buffer before uploading the updated software to the clients.
- [c19] 19.The method of claim 14 wherein the clients are remotely connected to the host through the Internet or through a local network.
- [c20] 20.The method of claim 14 wherein the updating device is a computer.

